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- (71) Applicant (for all designated States except US): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 1111 Franklin Street, Oakland, CA 94607-5200 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SAILOR, Michael, J. [US/US]; 3303 Caminito East Bluff #178, La Jolla, CA 92037 (US). MEADE, Shawn, O. [US/US]; 1975 Felspar Street, San Diego, CA 92109 (US).
- (74) Agent: FALLON, Steven, P.; Greer, Burns & Crain, Ltd., Suite 2500, 300 S. Wacker Drive, Chicago, IL 60606 (US).

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(54) Title: OPTICALLY ENCODED PARTICLES, SYSTEM AND HIGH-THROUGHPUT SCREENING

(57) Abstract: The invention concerns a particle (10, 10a) having a code from a library of codes embedded in its physical structure by refractive index changes between different regions of the particle. In preferred embodiments, a thin film possesses porosity that varies in a manner to produce a code detectable in the reflectivity spectrum. An assay detection method uses such a particle and detects a spectral shift in the presence of an analyte. Additional embodiments are disclosed including additional features.